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| 09/612,254 | 07/07/2000 | Masaharu Ikeda | JEL 31210 | 7590 |

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| EXAMINER | |
|---|---|
| LAO, LUN S | |
| **ART UNIT** | **PAPER NUMBER** |
| 2643 | |

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/612,254 | IKEDA, MASAHARU | |
| | Examiner | Art Unit | |
| | Lun-See Lao | 2643 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *25 August 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

*Introduction*

1. This action is response to the amendment filed 08-25-2004. Claims 1,7 and 13-16 have been amended and claims 1-22 are pending.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 7 and 13-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The driven" a bypass capacitor in which one end is connected to a source terminal, acting as a signal output terminal, of said field effect transistor and the other end is connected to a drain terminal, acting as a common output terminal of said field effect transistor"(see specification page 13 lines 15-20 and page 15 line 4-8) was not described and supported in the further detail in the specification nor in any of the claim.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 13, 15, are rejected under 35 U.S.C. 103(a) as being unpatentable over Papadopoulos (US PAT 6,504,937).

Consider claim 1, Papadopoulos teaches a condenser microphone apparatus comprising:

a movable electrode (diaphragm, see fig.1 (102)) which vibrates by an acoustic vibration;

a fixed electrode ( backplate, see fig.1, (102)) arranged so as to face said movable electrode;

a field effect transistor (see fig.1, (Q1)) that buffer-amplifying a voltage across said movable electrode (102) and a voltage across said fixed electrode (102); and

a series resistor (R2) inserted at least in one of an interval between said signal output terminal of said field effect transistor (Q1) and an output terminal (ground) of the apparatus (102) and an interval between said common output (ground) terminal of said field effect transistor (90) and a common output terminal (by pass C3 to ground) of the apparatus (see col.1 line 55-col.2 line 31); but Papadopoulos does not clearly teach a bypass capacitor in which one end is connected to a source terminal, acting as a signal

output terminal, of said field effect transistor and the other end is connected to a drain terminal, acting as a common output terminal of said field effect transistor.

However, Papadopoulos indicated a bypass capacitor (C3) in which one end is connected to a source terminal, acting as a signal output terminal, of said field effect transistor (Q1) and the other end is connected to a output (ground) terminal of said field effect transistor (Q1); and it was well known in the art at the time the present invention was made that the source and drain terminals of a typical field effect transistor are functionally interchangeable,

Therefore it would have been obvious that Popadopoulous could have the channel that it has a uniform concentration of impurities and the gate is placed in the middle of the channel, the FET is said to by symmetrical to interchange the drain and source terminals of the FET (90) of fig.3 to provide a convenient to the circuit designer.

Consider claim 13, Papadopoulos teaches a connecting apparatus which is connected to a conecting unit comprising:

a movable electrode (diaphragm see fig.1, (102)), which vibrates by an acoustic vibration;

a fixed electrode (backplate see fig.1, (102)) arranged so as to face said movable electrode;

a field effect transistor (see fig.1, (Q1)) that buffer-amplifying a voltage across said movable electrode (102) and a voltage across said fixed electrode (102); and a bypass capacitor (C3) in which one end is connected to a source terminal, acting as a signal output terminal of said field effect transistor (Q1) and the other end is connected to a

output (ground) terminal of said field effect transistor (Q1), wherein said connecting apparatus has a series resistor (R2) inserted at least in one of an interval between said signal output terminal of said field effect transistor (Q1) and an output terminal of the apparatus (102) and an interval between said common output (ground) terminal of said field effect transistor (Q1) and a common output (pass 108 to ground) terminal of the apparatus (102 and see col.1 line 55-col.2 line 31); but Papadopoulos does not clearly teach a bypass capacitor in which one end is connected to a source terminal, acting as a signal output terminal, of said field effect transistor and the other end is connected to a drain terminal, acting as a common output terminal of said field effect transistor.

However, Papadopoulos indicated a bypass capacitor (C3) in which one end is connected to a source terminal, acting as a signal output terminal, of said field effect transistor (Q1) and the other end is connected to a output (ground) terminal of said field effect transistor (Q1); and it was well known in the art at the time the present invention was made that the source and drain terminals of a typical field effect transistor are functionally interchangeable,

Therefore it would have been obvious that Papadopoulos could have the channel that it has a uniform concentration of impurities and the gate is placed in the middle of the channel, the FET is said to by symmetrical to interchange the drain and source terminals of the FET (90) of fig.3 to provide a convenient to the circuit designer.

Consider claim 15, Papadopoulos teaches a connecting apparatus which is connected to a condenser microphone unit comprising:

a movable electrode (diaphragm see fig1, (102)), which vibrates by an acoustic vibration;

a fixed electrode (backplate see fig.1, (102)) arranged so as to face said movable electrode; and

a field effect transistor (Q1) that buffer-amplifying a voltage across said movable electrade (diaphragm see fig.1, (102)) and a voltage across said fixed electrode (backplate see fig.1, (102)),

wherein said connecting apparatus (102) has a bypass capacitor (C3) in which one end is connected to a source terminal, acting as a signal output terminal of field effect transistor (Q1) and the other end is connected to a common output (ground) terminal of said field effect transistor (Q1), and

a series resistor (R2) inserted at least in one of an interval between said signal output terminal of said field effect transistor (Q1) and an output terminal of the apparatus (102) and an interval between said common output (ground) terminal of said field effect transistor (Q1) and a common output (ground) terminal of the apparatus (102 and see col.1 line 55-col.2 line 31); but Papadopoulos does not clearly teach a bypass capacitor in which one end is connected to a source terminal, acting as a signal output terminal, of said field effect transistor and the other end is connected to a drain terminal, acting as a common output terminal of said field effect transistor.

However, Papadopoulos indicated a bypass capacitor (C3) in which one end is connected to a source terminal, acting as a signal output terminal, of said field effect transistor (Q1) and the other end is connected to a output (ground) terminal of said field

effect transistor (Q1); and it was well known in the art at the time the present invention was made that the source and drain terminals of a typical field effect transistor are functionally interchangeable,

Therefore it would have been obvious that Papadopoulos could have the channel that it has a uniform concentration of impurities and the gate is placed in the middle of the channel, the FET is said to by symmetrical to interchange the drain and source terminals of the FET (90) of fig.3 to provide a convenient to the circuit designer.

7. Claims 2 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papadopoulos (US PAT 6,504,937) in view of Kubota (US PAT. 5,635,670).

Consider claims 2, 18, Papadopoulos does not explicitly teach the at least one of said series resistor (see fig.3 (106)) and that said bypass capacitor (110,112) is made of a multi-Layer film.

However, Kubota teaches the at least one of series resistor and said bypass capacitor is made of a multi-Layer film (see col.1 lines 18-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Papadopoulos and Kubota to provide a multilayer electronic component which can reduce arrangement pitches for external electrodes.

8. Claims 3-4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papadopoulos (US PAT 6,504,937) in view of Takuya (US PAT. 4,525,817).

Consider claims 3-4, Papadopoulos does not explicitly teach the series resistor (see fig.3, (106)) is formed by adhering a resistor onto a surface or an inner layer of a wiring circuit board; and an apparatus of the series resistor (see fig.3, (106)) inherently is formed by filling a resistor into a viahole (78) of a wiring circuit board (see fig.3).

However, Takuya teaches an apparatus of the series resistor is formed by adhering a resistor onto a surface or an inner layer of a wiring circuit board (see col.1 line 60-col.2 line 35); and an apparatus of the series resistor is formed by filling a resistor into a viahole (see fig.3a) of a wiring circuit board (col.3 lines 20-68).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Papadopoulos and Tauya to provide a an acoustic resistor capable of affording a desired acoustic impedance to the tone aperture portion of an electro-acoustic transducer.

Consider claim 17, Papadopoulos does not explicitly teach the series resistor (see fig.3 (106)) is made of a resistive fiber or a conductive rubber.

However, Takuya teaches an apparatus of the series resistor is made of a resistive fiber or a conductive rubber (see col3 lines 20-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Popadoulos and Tauya to provide an acoustic resistor capable of affording a desired acoustic impedance to the tone aperture portion of an electro-acoustic transducer.

9. Claims 5-6 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papadopoulos (US PAT 6,504,937) in view of Lininger (US PAT. 3,944,756).

Consider claim 5, Popadopoulous does not clearly teach an apparatus of the series resistor is installed a board provided outside of the apparatus.

However, Lininger teaches an apparatus of the series resistor (see fig.3, (106)) is installed a board provided outside of the apparatus (24);

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Papadopoulos and Lininger to provide a more specifically an electret microphone constructed in a manner.

Consider claim 6, Lininger teaches an apparatus of an electrostatic shield (see fig.3 (24)) is provided at least in one of an interval between said fixed electrode (56) and said signal output terminal (82,88) of the apparatus (24), an interval between said fixed electrode (56) and said bypass capacitor (110,112), and an interval between said fixed electrode (56) and said series resistor (106).

Consider claim 20, Papadopoulos does not explicitly teach an apparatus of the series resistor comprises a spring terminal connector constructed by a resistive spring material.

However Lininger teaches an apparatus of the series resistor (see fig.3 (106)) comprises a spring (86) terminal connector constructed by a resistive spring material (see col.3 line 50-col.4 line 61),

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Papadopoulos and Lininger to provide a

more specifically an electret microphone constructed in a manner simplifying electrical connection to the backplate of the microphone.

Consider claim 21, Lininger teaches an apparatus of the series resistor (see fig.3, (106)) inherently is formed by adhering a resistor onto a surface (circuit board) or an inner layer of a wiring circuit board.

10. Claims 7, 9-12, 14 and 16, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papadopoulos (US PAT 6,504,937) in view of Sondermeyer (US PAT. 5,197,102).

Consider claim 7, Papadopoulos teaches a condenser microphone apparatus comprising:

A movable electrode (see fig.1 (102 electret diaphragm)) which vibrates by an acoustic vibration;

a fixed electrode (102, such as backplate, a source terminal coupled to ground) arranged so as to face said movable electrode (see fig.1 (102 electret diaphragm));

amplifying means, comprising a filed effect transistor (see fig.1, Q1, JFETN) for buffer-amplifying a voltage across said movable electrode (see fig.1 (102 electret diaphragm)) and said fixed electrode, (102, a source terminal coupled to ground and see abstract); said amplifying means (Q1) inherently for providing the amplified voltage to a signal out transmission line (102, a source terminal coupled to ground and see abstract);

a bypass capacitor (C3) in which one end is connected to a source terminal, acting as a signal output terminal (drain), of said field effect transistor (Q1) and the other end is connected to a common output (ground) terminal of said field effect transistor (Q1); and a serial circuit of a blocking capacitor (C2) and a damping resistor (R2 (R2 is influence of diaphragm's moving)), in which one end is connected to said signal output terminal (drain) of said amplifying means (Q1) and the other end is connected to the common output (ground) terminal of said amplifying means (Q1 and see col.1 line 55-col.2 line 31), said bypass capacitor (C3) operating to bypass a high frequency signal (high frequency to the ground and low frequency bypass (R2) resistor, because, capacitor C3 and resistor R2 is low pass filter) from an external circuit (102 or 104)(see col.1 line 55-col.2 line 31), comprising said signal output transmission line said bypass capacitor (C3), and said serial circuit (see col.1 line 55-col.2 line 31), but Papadopoulos does not clearly teach a bypass capacitor (C3) in which one end is connected to a source terminal, acting as a signal output terminal, of said field effect transistor and the other end is connected to a drain terminal, acting as a common output terminal of said field effect transistor; and a serial circuit operating to damp a parallel resonance of an equivalent circuit.

However, Papadopoulos indicated a bypass capacitor (C3) in which one end is connected to a source terminal, acting as a signal output terminal, of said field effect transistor (Q1) and the other end is connected to a output (ground) terminal of said field effect transistor (Q1); and it was well known in the art at the time the present invention

was made that the source and drain terminals of a typical field effect transistor are functionally interchangeable,

Therefore it would have been obvious that Papadopoulos could have the channel that it has a uniform concentration of impurities and the gate is placed in the middle of the channel, the FET is said to by symmetrical to interchange the drain and source terminals of the FET (90) of fig.3 to provide a convenient to the circuit designer.

On the other hand, Sondermeyer teaches a serial circuit (see fig.1 (70,74)) operating to damp a parallel resonance of an equivalent circuit (see col.5 line 25-col.6 line 62).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Popadopoulos and Sondermeyer to provide a output impedance of the amplifier is reduced of adjusted in order to decrease the damping factor.

Consider claims 9-12, Papadopoulos teaches an apparatus of the damping resistor (see fig.1, R2 (R2 is influence of diaphragm's moving)) inherently is formed by adhering a resistive material onto a surface (circuit board) or an inner layer of a wiring circuit board; and an apparatus of the serial circuit of said blocking capacitor (fig.1, (C2)) and said damping resistor (R2 (R2 is influence of diaphragm's moving)) inherently is installed on a board provided outside of the apparatus (102); and an apparatus (see fig.1, (102)) of an electrostatic shield is provided at least in one of an interval between said fixed electrode (102, such as backplate, a source terminal coupled to ground) and a signal output terminal of the apparatus (102), an interval between said fixed electrode(102, such as backplate, a source terminal coupled to ground) and said

blocking capacitor (C2), and an interval between said fixed electrode (102, such as backplate, a source terminal coupled to ground) and said damping resistor (R2 (R2 is influence of diaphragm's moving and see abstract)); and an apparatus of the amplifying means (Q1) is constructed by a field effect transistor (see abstract).

Consider claim 14, Papadopoulos teaches a connecting apparatus which is connected to a condenser microphone unit comprising:

a movable electrode (see fig.1 (102 electret diaphragm)) which vibrates by an acoustic vibration (see col.1 line 53-col.2 line3);

a fixed electrode (102, such as backplate, a source terminal coupled to ground) arranged so as to face said movable electrode (see fig.1 (102 electret diaphragm));

amplifying means, comprising a field effect transistor (see fig.1, Q1, JFETN), for buffer-amplifying a voltage across said movable electrode (see fig.1 (102 electret diaphragm)) and said fixed electrode, (102, a source terminal coupled to ground and see abstract);

said amplifying means (Q1)
inherently providing the amplified voltage to a signal out transmission line (see abstract);

a bypass capacitor (C3) in which one end is connected to a source terminal, acting as a signal output terminal (drain) of said field effect transistor (Q1) and the other end is connected to a drain terminal, acting a common output (ground) terminal of said field effect transistor (Q1); and a serial circuit of a blocking capacitor (C2) and a damping resistor (R2 (R2 is influence of diaphragm's moving)), in which one end is connected to said signal output terminal (drain) of said amplifying means (Q1) and the

other end is connected to the common output (ground) terminal of said amplifying means (Q1 and see col.1 line 55-col.2 line 31), said bypass capacitor (C3) operating to bypass a high frequency signal (high frequency to the ground and low frequency bypass (R2) resistor, because, capacitor C3 and resistor R2 is low pass filter) from an external circuit (102 or 104)(see col.1 line 55-col.2 line 31),

wherein said connecting apparatus (102) has a serial circuit of a blocking capacitor (C2) and a damping resistor (R2 (R2 is influence of diaphragm 's moving)), in which one end is connected to said signal output terminal (drain) of said amplifying means (Q1) and the other end is connected to the common output (ground) terminal of said amplifying means (Q1 and see col.1 line 55-col.2 line 33); and comprising said signal output transmission line said bypass capacitor (C3), and said serial circuit (see col.1 line 55-col.2 line 31), but Papadopoulos does not clearly teach a bypass capacitor (C3) in which one end is connected to a source terminal, acting as a signal output terminal, of said field effect transistor and the other end is connected to a common output terminal of said field effect transistor; and a serial circuit operating to damp a parallel resonance of an equivalent circuit.

However, Papadopoulos indicated a bypass capacitor (C3) in which one end is connected to a source terminal, acting as a signal output terminal, of said field effect transistor (Q1) and the other end is connected to a output (ground) terminal of said field effect transistor (Q1); and it was well known in the art at the time the present invention was made that the source and drain terminals of a typical field effect transistor are functionally interchangeable,

Therefore it would have been obvious that Papadopoulos could have the channel that it has a uniform concentration of impurities and the gate is placed in the middle of the channel, the FET is said to by symmetrical to interchange the drain and source terminals of the FET (90) of fig.3 to provide a convenient to the circuit designer.

On the other hand, Sondermeyer teaches a serial circuit (see fig.1 (70,74)) operating to damp a parallel resonance of an equivalent circuit (see col.5 line 25-col.6 line 62).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Popadopoulos and Sondermeyer to provide a output impedance of the amplifier is reduced of adjusted in order to decrease the damping factor.

Consider claim 16, Papadopoulos teaches a connecting apparatus which is connected to a condenser microphone unit comprising:

a movable electrode (see fig.1 (102 electret diaphragm)) , which vibrates by an acoustic vibration;

a fixed electrode arrange (102, such as backplate, a source terminal coupled to ground) so as to face said movable electrode (see fig.1 (102 electret diaphragm)) ; and

amplifying means, comprising a field effect transistor (see fig.1 Q1), for buffer-amplifying a voltage across said movable electrode (see fig.1 (102 electret diaphragm)) and said fixed electrode (102, such as backplate, a source terminal coupled to ground and see abstract), said amplifying means (Q1) inherently providing the amplified voltage to a signal out transmission line (see abstract);

wherein said connecting apparatus (102) has a bypass capacitor (C3) in which one end is connected to a source terminal, acting as a signal output terminal (drain) of said field effect transistor (Q1) and the other end is connected to a drain terminal, acting as a common output (ground) terminal of said field effect transistor (Q1), said bypass capacitor (C3) operating to bypass a high frequency signal (high frequency to the ground and low frequency bypass (R2) resistor, because, capacitor C3 and resistor R2 is low pass filter) from an external circuit (102 or 104)(see col.1 line 55-col.2 line 31), and

a serial circuit of a blocking capacitor (C2) and a damping resistor (R2 is influence of diaphragm 's moving), in which one end is connected to said signal output terminal of said amplifying means (Q1) and the other end is connected to the common output (ground) terminal of said amplifying means (Q1 and see col.1 line 55-col.2 line33), and comprising said signal output transmission line said bypass capacitor (C3), and said serial circuit (see col.1 line 55-col.2 line 31), but Papadopoulos does not clearly teach a bypass capacitor (C3) in which one end is connected to a source terminal, acting as a signal output terminal, of said field effect transistor and the other end is connected to a drain terminal, acting as a common output terminal of said field effect transistor; and a serial circuit operating to damp a parallel resonance of an equivalent circuit.

However, Papadopoulos indicated a bypass capacitor (C3) in which one end is connected to a source terminal, acting as a signal output terminal, of said field effect transistor (Q1) and the other end is connected to a output (ground) terminal of said field

effect transistor (Q1); and it was well known in the art at the time the present invention was made that the source and drain terminals of a typical field effect transistor are functionally interchangeable,

Therefore it would have been obvious that Papadopoulos could have the channel that it has a uniform concentration of impurities and the gate is placed in the middle of the channel, the FET is said to by symmetrical to interchange the drain and source terminals of the FET (90) of fig.3 to provide a convenient to the circuit designer.

On the other hand, Sondermeyer teaches a serial circuit (see fig.1 (70,74)) operating to damp a parallel resonance of an equivalent circuit (see col.5 line 25-col.6 line 62).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Popadopoulos and Sondermeyer to provide a output impedance of the amplifier is reduced of adjusted in order to decrease the damping factor.

Consider claim 22, Papadopoulos teaches an apparatus of the damping resistor (see fig.1, R2 (R2 is influence of diaphragm 's moving)) inherently is formed by adhering a resistive material onto a surface (circuit board) or an inner layer of a wiring circuit board (see fig.1).

11. Claims 8 and 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Papadopoulos (US PAT 6,504,937) as modified by Sondermeyer (US PAT. 5,197,102)

as applied to claims 7, 14 and 16 above, and further in view of Kubota (US PAT. 5,635,670).

Consider claims 8 and 19, Papadopoulos does not explicitly teach an apparatus at least one of said bypass capacitor, said damping resistor, and said blocking capacitor is made of a multilayer film.

However, Kubota teaches an apparatus at least one of said bypass capacitor, said damping resistor, and said blocking capacitor is made of a multilayer film (see col.1 lines 18-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Popadopoulos and Sondermeyer into the teaching of Kubota to provide a multilayer electronic component which can reduce arrangement pitches for external electrodes.

***Response to Arguments***

12. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Regarding applicant's arguments that the combined teachings of Papadopoulos and Sondermeyer fail to suggest the feature recited in the claim 7 .....of the FET (see remark page last paragraph). See the new rejection of the claim.

Applicant further argued that Sondermeyer does not suggest an equivalent circuit comprising a signal output transmission line and a bypass capacitor (see remark page 20 lines 23).

The examiner respectfully disagrees. Sondermeyer teaches an equivalent circuit (see fig.1, 60) comprising a signal output transmission line and a bypass capacitor (74) (see col.5 line 25-col.6 line 62 and abstract). Therefore, Sondermeyer meets the limitation as claimed.

***Conclusion***

13. The prior art of record and not relied upon is considered pertinent to applicant's disclosure. Tanaka et al (US PAT 5,588,065) is recited to show other related the condenser microphone apparatus and its connecting apparatus.

14. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:(703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lao,Lun-See whose telephone number is (703) 305-2259 The examiner can normally be reached on Monday-Friday from 8:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached on (703) 305-4708.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (703) 306-0377.

Lao,Lun-See
Patent Examiner

DUC NGUYEN
PRIMARY EXAMINER